

REMARKS

Applicants thank the Examiner for the thorough consideration given the present application.

Claims 5-7, 11, 12 and 15 are now present in this application. Claims 5, 11 and 12 are independent. Claims 5, 11, 12 and 15 are amended and claims 8, 13 and 14 are canceled. Reconsideration of this application is respectively requested.

Rejections under 35 U.S.C. §103

Claims 5-7 and 12-15 stand rejected under 35 U.S.C. §103(a) as being unpatentable over US 6,565,327 (Yoo et al.) in view of US 4,875,000 (Fry et al.), and Claims 8 and 11 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Yoo et al., Fry et al. and US 6,289,680 (Oh et al.). These rejections are respectively traversed.

Complete discussions of the Examiner's rejections are set forth in the Office Action, and are not being repeated here.

In the present invention, the detecting means detects a current, the storing means stores a standard current value, and the comparing means compares the detected current value and the pre-stored standard current value. Based on the comparison result between the detected current value and the pre-stored standard current value, the control means cuts off a current applied to the compressor by turning off the current control means when the detected current value is greater than the standard current value. Also, the control means compares the stroke value estimated based on the detected voltage value, the detected current value and a motor constant of an interior motor of the compressor with the preset stroke reference value, and then varies a stroke of the compressor on the basis of the comparing result when the detected current value is the same as or smaller than the standard current value.

Yoo et al. and Fry et al. do not show such technical features as "control means for cutting a current applied to the compressor by turning off the current control means installed at the compressor when the detected current value is greater than the standard current value", "control means for comparing the stroke value estimated based on the detected voltage value, the detected current value and a motor constant of an interior motor of the compressor with the preset stroke

reference value, and then varying a stroke of the compressor on the basis of the comparing result when the detected current value is the same as or smaller than the standard current value" recited in claims 5 and 12 or "control means for increasing a voltage applied to the compressor by lengthening an on/off period of the current control means when he estimated stroke value is smaller than the stroke reference value" and "control means for decreasing a voltage applied to the compressor by shortening the on/off period of the current control means when the estimated stroke value is greater than the stroke reference value" recited in claims 5, 11 and 12.

Oh et al. is relied upon for disclosing a sensorless stroke estimator configured to receive stroke voltages supplied to the linear oscillating motor, estimate a stroke value and current information, and output the estimated stroke and the current information and does not cure the above noted deficiencies of Yoo et al. and Fry et al.

Applicants respectfully submit that the combinations of elements as set forth in independent claims 5, 11 and 12 are not disclosed or made obvious by the prior art of record, including Yoo et al., Fry et al. and Oh et al., for the reasons explained above. Accordingly, reconsideration and withdrawal of the rejection are respectfully requested.

With regard to dependent claims 6, 7 and 15, Applicants submit these claims depend, either directly or indirectly, from the independent claims 5 or 12 which are allowable for the reasons set forth above, and therefore are allowable. In addition, these claims recite further limitations which are not disclosed or made obvious by the applied prior art references. Reconsideration and allowance thereof are respectfully requested.

Conclusion

All of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding rejections and that they be withdrawn. It is believed that a full and complete response has been made to the outstanding Office Action, and as such, the present application is in condition for allowance.

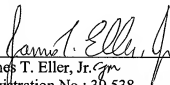
If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone Chris McDonald, Registration No. 41,533, at (703) 205-8000, in the Washington, D.C. area.

Prompt and favorable consideration of this Amendment is respectfully requested.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

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Respectfully submitted,

By 

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